



Software Delivery Assistant Version 2.0 Administrator's Guide



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Note: Before using this information and the product it supports, read the information in Appendix B, "Notices," on page 29.

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About this guide

This guide provides information about the IBM® Software Delivery Assistant Version 2.0 (SDA 2.0) program, a Java™ technology-based, Web-enabled software-distribution solution.

This guide is organized as follows:

- Chapter 1, “About the SDA 2.0 program,” on page 1 is an introduction to the concepts, benefits, and functions.
- Chapter 2, “Installing the SDA 2.0 program,” on page 3 provides information about installing the SDA 2.0 program.
- Chapter 3, “Building your software library,” on page 5 provides an overview of the tasks required to create your software packages and bundles and add them to the SDA 2.0 library.
- Chapter 4, “Using the SDA 2.0 administrator’s console,” on page 9 provides step-by-step information about using the administrator’s console to prepare software packages and bundles and create a portable catalog.
- Chapter 5, “Troubleshooting,” on page 21 provides helpful information about solving problems discovered while installing and using the SDA 2.0 program.
- Chapter 6, “Getting help and support,” on page 23 contains instructions about getting help and support for the SDA 2.0 program from IBM.
- Appendix A, “Sample folder structure,” on page 25 contains sample folder structures for the SDA 2.0 server.
- Appendix B, “Notices,” on page 29 contains legal notices and trademark information.

Who should read this guide

This guide is intended for network administrators who are responsible for software distribution processes in their company.

Additional information

This guide provides Web addresses where you can obtain additional information. These Web addresses are subject to change. If you find that a Web address does not work, go to the home page of the Web site for the referenced company (for example, <http://www.ibm.com>) and then search for the appropriate term or phrase (for example, “Software Delivery Assistance”).

Chapter 1. About the SDA 2.0 program

The IBM Software Delivery Assistance Version 2.0 (SDA 2.0) program is a software-delivery solution that uses Web-based tools and technology to create software catalogs, which are used to deliver software components to computers distributed throughout a business on a CD, DVD, or network drive.

This chapter includes the following topics:

- “What is the SDA 2.0 program?”
- “Features of the SDA 2.0 program”
- “SDA 2.0 components” on page 2

What is the SDA 2.0 program?

The SDA 2.0 program is a software-distribution product that enables an administrator use a local host administrator’s console to create software packages and bundles, and to export portable catalogs. The portable catalogs are distributed through CD, DVD, or a network drive.

When the catalog CD or DVD is inserted into a computer or when a catalog is opened from a network drive, a software catalog opens displaying the available software packages and bundles.

When the user selects a software package or bundle, the catalog shows detailed data about the selected software package or bundle. If the software package or bundle the user selected meets the user’s needs, the user clicks the **Install** button. The install procedure starts automatically, if the user has the rights or privileges to install the software package on that computer.

Note: For environments requiring network distribution, you may upgrade to IBM SDA 2.0 Version 1.1. The Software Delivery Center program is a software-distribution product that is simple to manage and easily integrates into an existing customer network infrastructure. It is customizable and cost effective to implement and maintain. The Software Delivery Center program contains all of the functionality of SDA 2.0.

Features of the SDA 2.0 program

The program has many valuable features that work together to satisfy current customer requirements.

The SDA 2.0 program includes the following features:

- **Simple packaging requirements:** The SDA 2.0 process works with various industry-standard packaging tools and utilities, such as InstallShield, Wise InstallManager, WinZip Self-Extractor, and Microsoft Software Installer (MSI). Software and data files also can be distributed in an unpackaged format.
- **Incompatible installation prevention check:** You can restrict each software package to one or more operating-system environments. As you build each software package, you specify which platforms are supported and restrict the software package from being installed on computers with incompatible operating systems. If a software package has been designed only for installation

on a Microsoft Windows XP computer, a user with a Windows 2000 computer will not be permitted to install the software package.

- **Free-space checking:** Before a software package is installed on a computer, adequate free space must exist. The SDA 2.0 program checks the amount of free space to help ensure enough storage is available before the software package is delivered to a user.

SDA 2.0 components

The following components are provided as part of the SDA 2.0 product:

- Cloudscape
An embedded relational database-management system. This component allows the SDA 2.0 program to store and maintain the package metadata and log information.
- Installation program: SDA-SRVINST.EXE
A software package that installs the SDA 2.0 components.
- Administrator's console through the local host only
A browser-based interface used by administrators to prepare software packages and bundles and create software catalogs. Administrators can manage multiple catalogs for different groups or business units. Through this interface, the administrators also add, delete, and modify software packages and bundles.
- IBM Java 2 SE SDK Version 1.4.2
An industry-standard, platform-independent programming language.

The SDA 2.0 program also has provisions for downloading and installing Apache Tomcat Version 4.1.30. Apache Tomcat is a servlet container for Java servlet and JavaServer Pages technologies and is required by the SDA 2.0 program.

Note: Apache Tomcat Version 4.1.30 is the only version currently supported by the SDA 2.0 program and is required for installation. Although the SDA 2.0 installation process installs the Apache Tomcat program, you are responsible for downloading the Apache Tomcat Version 4.1.30 zipped file from <http://jakarta.apache.org/site/binindex.cgi> and copying the zipped file to a specific folder. See Chapter 2, "Installing the SDA 2.0 program," on page 3 for details.

Chapter 2. Installing the SDA 2.0 program

This chapter describes how to install and configure the SDA 2.0 program. The SDA 2.0 program is a Java-based Web application. Instead of interacting directly with the operating system, the SDA 2.0 program instead interacts with components, such as Java, Apache Tomcat, and the Cloudscape database.

This chapter includes the following topics:

- “Installation requirements”
- “Installing the IBM SDA 2.0 program”
- “Testing the SDA 2.0 program” on page 4

Installation requirements

The computer on which you intend to install the SDA 2.0 server must meet the following minimum system requirements:

Minimum hardware requirements:

- Intel® Pentium® 3 processor
- 512 MB of RAM minimum
For best performance, use 1 GB of RAM.
- CD-ROM drive
- CD-RW drive and third-party CD-recording software if you intend to distribute software by CD
- Recordable DVD drive and third-party DVD-recording software if you intend to distribute software by DVD
- 200 MB of free hard disk space

Minimum software requirements:

- One of the following operating systems:
 - Windows 2000 with Service Pack 4 or higher
 - Windows XP with Service Pack 1 or higher

Communication requirements:

- Internet access for the downloading of files during installation

Installing the IBM SDA 2.0 program

After you have verified that your computer meets the minimum requirements, you can install the IBM SDA 2.0 program from the installation CD. During this installation process several events take place:

- You will be prompted to download the Apache Tomcat 4.1.30 zipped file to the `c:\Tomcat4` folder.
- Apache Tomcat is installed.
- IBM JRE is installed.
- The Java home environment variable is created.
- The IBM SDA 2.0 Web application is installed, along with the IBM Cloudscape 5.1 database.

Complete the following procedure to install the IBM SDA 2.0 program:

1. Insert the Software Delivery Assistant CD. In most cases, the installation program starts automatically. If the installation program does not start, complete the following steps:
 - a. From the Windows desktop, click **Start**.
 - b. Click **Run**.
 - c. Type *d*:/sda-srvinst.exe (where *d* is the drive letter of the drive that contains the Software Delivery Assistant CD).
 - d. Click **OK**. The IBM Software Delivery Assistant Installation wizard starts.
2. Click **Next**. The Apache Tomcat 4.1.30 Required window opens.

Note: The following two steps require that you temporarily leave the Software Delivery Assistant Installation wizard.

3. Create a folder named c:\TOMCAT4.
4. Using your Web browser, go to:
<http://jakarta.apache.org/site/binindex.cgi> and download the Tomcat 4.1.30 zipped file to the c:\TOMCAT4 folder.
5. Return to the Software Delivery Assistant Installation wizard and click **Next**. The License Agreement window opens.
6. Read the license agreement. If you agree with the terms, select the **I accept the terms in the license agreement** option button, and then click **Next**. The Destination Folder window opens.
7. Either accept the default folder (c:\ibmsda) or use the **Browse** button to select a different folder.
8. Click **Next**. The Ready to Install the Program window opens.
9. Click **Install**. The Installing IBM Software Delivery Assistant window opens and the progress indicator displays the progress of the setup.
10. When the installation is complete, click **Finish**.
11. When prompted to restart the computer, close any open programs and remove any disks (CDs, diskettes, DVDs, and so on) from their drives; then, click **Yes**. Or, if you do not want to restart your computer at this time, you can click **No**; however, you must restart your computer before the SDA 2.0 program will be fully installed.

This concludes the installation of the SDA 2.0 program.

Testing the SDA 2.0 program

To test the SDA 2.0 program, do the following:

1. Start your browser and type <http://localhost:8080> in the Address bar; then press Enter. After a short delay, the Administration Login page is displayed.

Note: The Name and Password fields are case sensitive. In the following steps, type the name and password as lower case characters.

2. In the Name field, type sda.
3. In the Password field, type sda.
4. Click **Submit**. The SDA 2.0 administrator's console opens to the Package Management page.

To find information about using the SDA 2.0 administrator's console, refer to "Accessing the SDA 2.0 administrator's console" on page 9.

Chapter 3. Building your software library

This chapter provides an overview of the tasks required to create a software package or bundle and check it into your SDA 2.0 library. The SDA 2.0 library is the main repository for software packages and bundles.

This chapter includes the following topics:

- “Creating a folder structure for your library”
- “Creating a software package”
- “Creating a software bundle” on page 7
- “Creating a portable catalog” on page 7
- “Using a portable catalog” on page 7

Creating a folder structure for your library

Any package, folder, and file intended for distribution that is stored locally on the SDA 2.0 computer must be stored under the document root. The default document root is c:\IBMSDA\SDASERVER\SDC. Your document root might be different depending on the options you selected during installation.

In most cases, it is beneficial to use the \PACKAGES folder under the document root to help you organize the files associated with your packages. Under the \PACKAGES folder, you might want to organize your packages by operating system, type of application, or any other characteristic that meets the needs of your organization. It is a good idea to plan for your long-term organizational needs before designing your folder structure. Appendix A, “Sample folder structure,” on page 25 provides several samples to help you create your folder structure.

Creating a software package

Creating a software package involves the following tasks:

1. Creating the source files. See “Creating the source files” for details.
2. Determining where you will store the source files. See “Determining where to store the source files” on page 6 for details.
3. Adding the software packages to the SDA 2.0 library through the administrator’s console. See “Adding the software package to the SDA 2.0 library” on page 6 for details.

Creating the source files

The first step in creating a software package is creating the source files. The following are the source files associated with each package:

- The source software package (required): This file typically is created using a third-party packaging tool. The SDA 2.0 program supports any software package created by the following packaging tools:
 - InstallShield
 - Wise InstallManager
 - WinZip Self-Extractor
 - Microsoft Software Installer (MSI)

Note: For best results, the source package should be developed so it installs silently (without user intervention).

For information about using these tools, refer to the documentation provided by the packaging tools.

Optionally, the source software package can be in an unpacked format consisting of a folder structure containing all the files required for installation or data files for distribution.

- The icon file (optional): When a user selects a package from a catalog, the catalog displays basic information about the program, such as the file size and amount of disk space required. If an icon file is provided, the icon is displayed next to the basic information. The icon image can be either a .gif or .jpg file. Icons are displayed as 32 pixels by 32 pixels.
- The details file (optional): When a user selects a package from the catalog and wants more information than the basic information that is typically displayed, the user can click a Details button in the catalog to view the information in the details file. The details file must be in .TXT format and can contain any information deemed useful by the administrator. For example, if a README.TXT file is provided by the software vendor, the administrator might choose to use the README.TXT file as the details file.

Determining where to store the source files

After you have created your source files, you need to determine where you will store them. You must store the source files locally on the SDA 2.0 computer under the document root. The default document root is:

```
c:\IBMSDA\SDASERVER\SDC
```

Your document root might be different depending on the options you selected during installation. Packages stored locally on the SDA 2.0 computer are exported with the catalog when the catalog is prepared for distribution on CD, DVD, or a network drive. Package types are:

- Download(Open): A package created by a third-party packaging tool that consists of a single executable file.
- DirectoryDownload: An unpackaged set of files and folders. When this type of package is added to the library, the SDA 2.0 program automatically creates a compressed file containing these files and folders.

For more information about adding packages to the library, see “Adding the software package to the SDA 2.0 library.”

Adding the software package to the SDA 2.0 library

After the source package has been created, it must be added to the SDA 2.0 library through the administrator’s console. This process adds information in a database including a pointer to the source files and the text that appears in a catalog. This process does not physically copy any source files into the library; it simply creates database entries. If the source files need to be copied to the SDA 2.0 computer, the administrator must copy the files before the packages are added to the library database. If the source files are deleted or moved from their original location after the entries have been added to the database, the administrator must modify the software package information in the library to update the database. For details about adding a package to the library, see “Adding a new software package to the library” on page 9.

Creating a software bundle

A software bundle is a collection of software packages that is made available for users to select through a single catalog entry. After you have created the individual software packages, you can use the SDA 2.0 administrator's console to create a software bundle. Software bundles are optional. For details on creating a software bundle, see "Adding a new software bundle to the library" on page 10.

Creating a portable catalog

The SDA 2.0 program provides the capability of creating a portable catalog that can be run from a network drive, CD, DVD, or other portable media. The portable catalog contains software packages and bundles along with a Java-based application that displays the catalog and allows a user to select which software packages or bundles to install.

Creating a portable catalog is a two-step operation. First, you create an export group and select which software packages or bundles to include in the export group catalog. See "Adding or deleting a software package or bundle in a specific export group" on page 18 for details. Then, you invoke an export process that creates the portable catalog files and copies them to a folder. See "Creating a portable catalog" on page 19 for details.

Using a portable catalog

The portable catalog is an application; therefore, the operating system must be running before you can start the portable catalog.

If the portable catalog is on CD or DVD, in most cases it starts automatically when the CD or DVD is inserted into the drive. If the portable catalog does not start automatically or if the portable catalog is on a different type of media (such as network drive or USB memory key), you must use the following procedure:

1. Open Windows Explorer or My Computer and navigate to the folder where the portable catalog resides.
2. Double-click the SETUP.BAT file.

Note: If a message is displayed asking if you want to install the Build CD and Verify program, click **Start**. You see this message the first time you start a portable catalog on a computer. If you receive a message asking if you want to create a desktop icon, click **No**. This message is typically displayed the second time you start a portable catalog. When the portable catalog opens, make your selections from the **Packages** and **Bundles** tabs, then click **Install**.

Importing files from another library

You can import files from either of the following:

- Another SDA library
- A Software Delivery Center library

Throughout this procedure, the term *source computer* is used to identify either the SDA computer or SDC server that contains the files to be exported. The term *target computer* is used to identify the SDA 2.0 computer that will be importing the files.

Note: If the Software Delivery Center program is the source of the XML output file, LogicalDrive(Open) and LogicalDrive(Secure) packages are not supported in SDA 2.0.

Importing files from another library is a three-phase process.

1. The first phase involves creating an export group, defining the packages and bundles to be exported, and exporting an XML output file from the source computer. See “Creating an XML output file for an export group” on page 18.
2. The second phase adds the package entries to the target computer library database. This is accomplished by importing the XML output file that was exported by the source computer. See “Importing source files from another library” on page 19.
3. The third phase involves copying the software packages from the source computer to the target computer. See “Importing source files from another library” on page 19.

Chapter 4. Using the SDA 2.0 administrator's console

You can perform various administration tasks, such as managing software packages and bundles, creating portable CDs from the SDA 2.0 administrator's console.

This chapter provides the following topics:

- "Accessing the SDA 2.0 administrator's console"
- "Managing software packages and bundles"
- "Exporting and importing software packages and bundles" on page 17
- "Finding help" on page 20
- "Logging out of the SDA 2.0 administrator's console" on page 20

Accessing the SDA 2.0 administrator's console

With the administrator's console, you manage the SDA 2.0 process using a Web browser on the local host system.

To access the SDA 2.0 administrator's console, do the following:

1. Start your browser and type `http://localhost:8080` in the Address bar; then press Enter. After a short delay, the Administration Login page is displayed.

Note: The Name and Password fields are case sensitive. In the following steps, type the name and password as lower case characters.

2. In the Name field, type `sda`.
3. In the Password field, type `sda`.
4. Click **Submit**. The SDA 2.0 administrator's console opens to the Package Management page.

Managing software packages and bundles

Software packages are software files used to install a specific software application. Software bundles are groups of software packages. The Package Management screen and the Bundle Management screen show lists of software packages and bundles and their associated descriptions.

Adding a new software package to the library

If a software package file is stored on the SDA 2.0 computer it must be placed in a folder under the document root. For example, `c:\IBMSDA\SDAServer\sdc\packages`

(where `c:\IBMSDA\SDAServer\sdc` is the document root).

If you have not already set up a folder structure for your library, see "Creating a folder structure for your library" on page 5. For information about the source files (package file, details file, and icon file) referenced in this procedure, see "Creating a software package" on page 5.

To add a new software package to the library:

1. Create your package file, details file, and icon file.

2. If you intend to store your package file, details file, and icon file on the SDA 2.0 computer, create the folder structure for these files; then copy these files to the appropriate folder.
3. Open the administrator's console and then click **Packages**.
4. Click **New**. The Add Package window opens.
5. Complete the software package definition information. See "Software package definition information" on page 12 for details.
6. Click **Add**.

Adding a new software bundle to the library

To create a new software bundle:

1. Click **Bundles**.
2. Click **New**. The Add Bundle window opens.
3. Complete the software bundle definition information. See "Software bundle definition information" on page 16 for details.
4. Click **Add**.
5. Click **Next** or the **Packages** to display the list of available packages.
6. Select the check box beside the software package name you want to add to the bundle.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

7. When all packages to be added to the bundle have been checked, click **Update**. You will be prompted to select the order of installation for the packages in the bundle.
8. Select a software package name, click **UP** or **DOWN** to move the packages into the desired order.
9. Click **OK** to add the bundle.

Note: Packages that require a reboot should be the last package in the installation sequence.

Deleting a software package or bundle from the library

To delete a software package or bundle:

1. Click **Packages** or click **Bundles** depending on which you want to delete.
2. Click **All Packages** or click **All Bundles**. The List Packages or the List Bundles table is displayed.
3. Select the check box beside the software package or bundle name you want to delete.
4. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
5. Click **OK** to delete a software package or bundle name or click **Cancel** for no action.

Note: A software package can be deleted even if there are groups currently authorized to access the software package.

Searching the library for a software package or bundle

To search for a specific software package or bundle name:

1. Click **Packages** or click **Bundles** depending on which you want to locate.

2. Click **All Packages** or click **All Bundles**. The List Packages or List Bundles table is displayed.
3. Click **Search**. The Search window opens.
4. You can search by name, type or operating system. Do one or any combination of the following:
 - a. In the Name field, type the software package or bundle name.
The software package or bundle name is case sensitive. Type the name exactly as the name is listed in the package or bundle list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
 - b. In the Type field, select the file type.
 - c. In the OS field, select the operating system.
5. In the Page Size field, type the maximum number of entries per page to display.
6. Click **Search**. The selected software package or bundle name is displayed in the List Packages or List Bundles table.

Updating software package information in the library

To update a software package:

1. Click **Packages**.
2. Click **All Packages**. The List Packages table is displayed.
3. Click the software package name. The Update Package window opens.
4. Make the changes to the software package definition information. See “Software package definition information” on page 12 for details.
5. Click **Update**.

Note: Packages that require a reboot should be the last package in the installation sequence

Updating software bundle information in the library

To update a software bundle:

1. Click **Bundles**.
2. Click **All Bundles**. The List Bundles table is displayed.
3. Click the software bundle name. The Update Bundle window opens.
4. Make the changes to the software bundle definition information. See “Software bundle definition information” on page 16 for details.
5. Click **Update**.
6. Click **Next** or the **Packages** to display the list of available packages.
7. Select the check box beside the software package name you want to add to the bundle.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

8. When all packages to be added to the bundle have been checked, click **Update**. You will be prompted to select the order of installation for the packages in the bundle.
9. Select a software package name, click **UP** or **DOWN** to move the packages into the desired order.
10. Click **OK** to update the bundle.

Software package definition information

The following are the fields and descriptions required to create and edit software packages:

- **General tab**

- **Name:** Unique name of the software package.
- **Version:** Version number of the application.
- **Family:** Critical patch management information.
- **Details:** The path to the details file that displays when the user clicks the Details button in the SDA 2.0 catalog.

All warnings and relevant information about the software package should be placed in this file.

Note: The path name to the details file must be relative to the document root of the server. The default document root is c:\ibmsda\sdaserver\sd. Your document root might be different depending on the options you chose during installation.

- **Icon Path:** The path to the software package icon that displays in the SDA 2.0 catalog.

The icon must be a .gif or .jpg file. The use of an icon is optional.

Note: The path name to the file must be relative to the document root of the server. The default document root is c:\ibmsda\sdaserver\sd. Your document root might be different depending on the options you chose during installation.

- **Max Install Time (Min.):** The maximum amount of time in minutes the software package should take to install.

The software package installation will terminate if the installation does not complete within the specified time.

Note: Specify a large enough value to account for slow processors.

- **Silent:** Indication that the software package will install unattended.
Select this check box if the installation package is configured to install silently with no user intervention.
- **Reboot:** Indication that the software package requires a restart at the end of the installation.

- **Install tab**

- **Type:**
 - Download(Open) - This type of package consists of a single executable file that resides under the document root of the SDA 2.0 computer.
 - DirectoryDownload - This type of package consists of an unpackaged application or a set of data files that resides under the document root of the SDA 2.0 computer. When this type of package is created, the SDA 2.0 program creates a compressed zipped file that contains the complete set of files in the original folder structure. The client application in the portable catalog decompresses the zipped file and restores the files and folders to their original condition.
 - If an installation command is defined in the Parameters field, an installation process takes place after the package is decompressed and the directory which was delivered is removed after the installation is completed.

- If a parameter is not defined in the Parameter field, no action is taken after the package is decompressed. This type of package is useful for distributing data files and templates.

Note: If you make changes to the content of the DirectoryDownload package, you must delete the _IGS.SDC zipped file located in the source directory as specified in the **Remote File** field.

- **Remote File:** The definition of this field depends on the type of package you are defining.

When used with a package type of DirectoryDownload, this is the relative path to the root folder of the application or data files stored on the SDA 2.0 server. Relative paths are relative to the document root. For example, if the full path to the root folder of a set of data files located on the SDA 2.0 server is:

```
c:\IBMSDA\SDAServer\sdc\packages\FILES\TEMPLATES
```

the relative path would be:

```
/sdc/packages/FILES/TEMPLATES
```

It is also important to understand that the last folder in the relative path is the starting point of the directory structure that will be extracted to the client. For example, if you specify \sdc\packages\FILES\TEMPLATES the TEMPLATES folder, all files in the TEMPLATES folder, and all subfolders under the TEMPLATES folder will be extracted to the client.

When used in conjunction with a package type of Download(Open), this is the relative path to the software package executable file. This path must be relative to the document root of the SDA 2.0 server. For example, if the full path is:

```
c:\IBMSDA\SDAServer\sdc\packages\XP\My_Package\SETUP.EXE
```

the relative path would be:

```
/sdc/packages/XP/My_Package/SETUP.EXE
```

Note: Path names are case sensitive. Make sure the path name you use matches exactly the actual path name on your SDA 2.0 server.

Supported extensions for the remote files are:

- .CMD
- .EXE
- .MSI
- .RPM
- .TAR
- .VBS
- Null (no extension)
- **Install Command:** This field is not supported in this version of the product.
- **Parameters:** The parameters that are passed to the software package executable.

They are required for the DirectoryDownload package type, if an installation process is required.

Examples of parameters are:

- /s for a silent installation of InstallShield and Wise InstallSystem
- /qn for a silent installation of Microsoft Software Installer packages (.msi file extension)

The actual parameters depend on the tool that was used to create the package. Refer to the documentation provided with the packaging tool for more information.

- **Windows RegKey:** The appropriate string that matches the program name displayed in the Add/Remove Programs dialog. For example, to view the string in Windows 2000, click **Start**, click **Settings**, click **Control Panel** and then click **Add/Remove Programs**. You must use the program name exactly as shown in the Add/Remove Programs dialog.

This field is used by the SDA 2.0 program to determine if a particular software package is already installed on the client. The SDA 2.0 program queries the Windows registry to determine what programs have been installed and also listed in the Add/Remove Programs dialog.

In some cases, when you look in the Add/Remove Programs dialog box, it might not be obvious if there is an extra space at the end of the string or between words. The following method ensures that the value you place in the **Windows RegKey** field matches the value in the Add/Remove Programs dialog box.

1. Install the application on a test computer or go to a computer where the application is already installed.
2. From the Windows desktop, click Start and then click Run. The Run window opens.
3. In the Open field, type regedit; then, click OK. The Registry Editor window opens.
4. In the Registry Editor window, navigate to the HKEY_LOCAL_MACHINE/SOFTWARE/Microsoft/Windows/CurrentVersion/Uninstall folder.
5. In the left pane, click the appropriate application name.
6. In the right pane, double-click **DisplayName**. The Edit String window opens.
7. The string highlighted in the Value data field is the exact string you need to use in the **Windows RegKey** field. Copy and paste the string into a TXT file.
8. Return to the Edit String Window and click **Cancel**. Then, close the Registry Editor window.
9. Take the TXT file to the SDA 2.0 computer. Then, copy the complete string from the TXT file and paste it into the **Windows RegKey** field.

Note: The administrator can specify either the **Stamp File** field or **Windows RegKey** field. The **Windows RegKey** field should be used, unless this software package does not register itself in the Add/Remove Programs dialog.

- **Stamp File:** The stamp file indicates that the software package installed successfully on the client.

The SDA 2.0 process checks for the existence of the stamp file after the completion of the software package installation. The stamp file is used as a means of getting a return code from the software package. The software package itself must create the stamp file after the software package has successfully installed. The software package must not create the stamp file if the application does not successfully install. The software package is responsible for writing the stamp file because there is no agreed upon standard among software vendors that indicates a particular installation was successful. Often, the installation program will return with a return code of

zero for a successful installation, but this is not always the case. Therefore, each individual package must determine if the software installed successfully, and if so, create the software package stamp file. For this field specify the full path for the stamp file for which to check.

Note: The administrator can specify either the **Stamp File** field or **Windows RegKey** field. The **Windows RegKey** field should be used, unless the software package does not register in the Add/Remove Programs dialog.

- **Stamp Mode:** The stamp file mode.

The stamp file mode must be set to one of the following types:

- Auto: The SDA 2.0 client applet automatically creates the stamp file after the installation program completes. Auto stamp file mode is provided for development and testing of software packages.
- Package: The software package itself creates the stamp file after the software package has successfully installed.
- Dated: Dated time stamp mode is used to instruct the SDA 2.0 process to check the time stamp of the stamp file in addition to the existence of the file.

- **Stamp File Date:** The time stamp (date and time of the target stamp file).

When a **Stamp Mode** of “Dated” is selected, the software package passes the stamp file check only if the last modified date of the stamp file matches the date specified. The date is specified in Java-epoch milliseconds, the number of milliseconds since the Java epoch, defined as midnight, January 1, 1970 GMT. These are the number of milliseconds that have elapsed since January 1, 1970 00:00.

To generate the stamp file time stamp, run the following command from a Windows command prompt:

```
:java -jar printstamp.jar filename
```

where *filename* is the stamp file name.

Note: The printstamp.jar file is provided as part of the SDA 2.0 computer software in the *c:\ibmsda\sdaserver\sdca\apps\printstamp.jar* folder.

(where *c:\ibmsda\sdaserver\sdca* is the default document root). Your document root might be different depending on the options you choose during installation.

- **Target tab**

- **Temp. Space Required (MB):** The amount of temporary disk space in megabytes required to install the software package.

This is usually the temporary space required to unpack a software package prior to installation. The drive that is checked is the same drive that the Java Runtime Environment on the client uses for temporary space and is usually specified by the environment variable “tmp” or “temp”.

Note: If the drive letter used by the Java runtime environment for temporary space is the same drive letter specified in the **Target Directory** field, then the values in the **Temp. Space Required (MB)** field and **Target Space Required (MB)** field are added together before the free space check is performed; otherwise, two separate free space checks are performed.

- **Target Space Required (MB):** The amount of disk space in megabytes required to install the software package.

The drive letter on which to perform the free space check is specified by the entry in the **Target Directory** field.

- **Target Directory:** The definition of the this field depends on the type of package you are defining.

When used with a package type of DirectoryDownload, this is the path to the folder under which the files in the package will be extracted. Example:

c:\Documents and Settings\All Users

When used with package type of Download(Open), this is the drive letter on which the software package will be installed. Example:

c:\

This folder will be checked for the required amount of free disk space prior to the installation of the software package.

- **Prerequisite Program:** The path name of the prerequisite program that is run prior to installing the software package.

If this program returns with a return code of zero, the SDA 2.0 program assumes that all of the prerequisites for this software package have been met. A non-zero return code indicates to the SDA 2.0 program that the prerequisites have not been met and the software package will not install.

- **Preinstall Program:** A program or script that runs before the installation of the software package.
- **Postinstall Program:** A program or script that runs after the installation of the software package. If the software package is run from a software bundle, a non-zero return code causes subsequent software packages in the software bundle not to run.

- **Platform tag**

- **Target Platforms:** The operating-system platforms on which this software package can be installed.

The SDA 2.0 program checks for the presence of the specified operating systems to determine if the software package should be displayed in the catalog. One or more operating systems can be specified by clicking the appropriate check box.

Software bundle definition information

The following are the fields and descriptions required to create and edit software bundles:

- **Name:** Unique name of the software bundle
- **Description:** The description of the software bundle.
- **Stamp File:** The stamp file indicates that the software bundle installed successfully on the client.

The SDA 2.0 process checks for the existence of the stamp file after the software bundle has been installed. The stamp file is used as a means of getting a return code from the software bundle. The software bundle itself must create the stamp file after all of the software packages in the bundle have successfully installed.

The software bundle must not create the stamp file if any of the software packages do not successfully install. The software bundle is responsible for writing the stamp file because there is no agreed upon standard among software vendors that indicates a particular installation was successful. Often the installation program will return with a return code of zero for a successful installation, but this is not always the case. Therefore, each individual software

bundle must determine if the software installed successfully, and if so, create the stamp file. For this field, specify the full path of the stamp file for which to check.

- **Selectable:** Indication that the software bundle can be selected.
- **Supported OS:** The operating systems on which a software bundle can be installed.

The SDA 2.0 program checks for the presence of the specified operating systems to determine if the software package should be displayed in the catalog. One or more operating systems can be specified by clicking the appropriate check box.

Exporting and importing software packages and bundles

You use the Export/Import function to do the following:

- Create a portable catalog containing software packages and bundles that can be distributed on CD or a network drive.
- Export an XML file from a source SDA 2.0 server that can be imported on a target SDA 2.0 server to update the library database.

For a more detailed description of the Export/Import function, see “Creating a portable catalog” on page 7 and “Importing files from another library” on page 7.

Adding a new export group

To create a new export group:

1. Click **Export/Import**.
2. Click **New**. The Add Export window opens.
3. In the Name field, type the export group name.
4. In the Description field, type the associated export group name description.
5. Click **OK**.

Deleting an export group

To delete an export group:

1. Click **Export/Import**.
2. Click **All Exports**. The List Exports table is displayed.
3. Select the check box beside the export group name you want to delete.
4. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
5. Click **OK** to delete an export group or click **Cancel** for no action.

Searching for an export group

To search for a specific export group name:

1. Click **Export/Import**.
2. Click **All Exports**. The List Exports table is displayed.
3. Click **Search**. The Search window opens.
4. In the Name field, type the group name.

The export group name is case sensitive. Type the name exactly as the name is listed in the export group list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.

5. In the Page Search field, type the maximum number of entries per page to display.
6. Click **Search**. The selected export group name and description is displayed in the List Exports table.

Changing the export name and description

To change the export name and description:

1. Click **Export/Import**.
2. Click **All Exports**. The List Exports table is displayed.
3. Click the export group name. The Edit Export window opens.
4. Make changes to the export group name, or description, or both.
5. Click **OK** to update the information or click **Cancel** for no action.

Adding or deleting a software package or bundle in a specific export group

To add or delete a software package or bundle in a specific export group:

1. Click **Export/Import**.
2. Click **All Exports**. The List Exports table is displayed.
3. Click the export group name.
4. Click **Packages** or click **Bundles**. The Package List or Bundle List table for a specific export group is displayed.
5. Select or clear the check box beside the software package or bundle name you want to include or delete.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

6. Click **OK**.

Creating an XML output file for an export group

This procedure creates XML output from the packages and bundles contained in the export group. It can be imported to another SDA 2.0 server to provide additional entries in a SDA 2.0 library. To create XML output from packages and bundles in a specific group:

1. Click **Export/Import**.
2. Click **New**. The Add Export window opens.
3. In the Name field, type the export group name.
4. In the Description field, type the associated export group name description.
5. Click **Apply**.
6. Click **Packages**. The Package List for Export window is displayed.
7. Select the check box beside the packages you want to add.
8. Click **Apply**.
9. Click **Bundles**. The Bundle List for Export window is displayed.
10. Select the check box beside the bundles you want to add.
11. Click **Apply**.
12. Click **Output XML**. The XML output file opens.
13. Click **File**.
14. Click **Save As** to save the XML output file to the appropriate media, server, drive, or file.

15. Close the browser window containing the XML output.

Creating a portable catalog

To create a portable catalog:

1. Click **Export/Import**.
2. Click **CD Export**. The Java-based Import/Export Utility window opens.
3. In the Export Group field, click an export name.
4. In the Image Location field, type in the file name or use **Browse** to select the folder where the portable catalog files and folders can be stored.

Note: The folder must be new or empty.

5. If the software packages should be installed only from the SDA 2.0 catalog, click **Reversibly Corrupt** (optional). These package executables have to be installed through the SDA 2.0 and cannot be installed outside of the client catalog.
6. If this is a one-time run of the client catalog, click **Delete Image After Install** (optional). All files and directories in the Image Location area are deleted after the client catalog is exited.
7. Click **Export**. When the export process is complete, **done** is displayed at the bottom of the window.
8. If you want to put the portable catalog on CD or DVD, use the CD/DVD recording software of your choice to copy the portable catalog files and folders to the CD or DVD. If you want to put the portable catalog on a network drive or other media, copy the files to the appropriate drive or media.

Note: Make sure you maintain the folder structure and include all of the files and folders.

Importing source files from another library

The following procedure assumes you have already created the XML output file from the source computer. If you have not, export the XML file from the source computer now before you start this procedure. See “Creating an XML output file for an export group” on page 18.

Note: If the Software Delivery Center program is the source of the XML output file, LogicalDrive(Open) and LogicalDrive(Secure) packages are not supported in SDA 2.0.

Throughout the following procedure, the term *source computer* is used to identify the SDA 2.0 server that currently contains the XML source file and software packages to be exported. The term *target computer* is used to identify the SDA 2.0 server to which the files will be imported.

1. Copy the XML output file to the target computer using one of the following methods:
 - From the target computer map to the source computer. Then, copy the XML output file from the source computer to the target computer.
 - At the source computer, copy the XML output file to portable media. Then, bring the portable media to the target computer and copy the XML source file anywhere on the target computer.
2. At the target computer, open the SDA 2.0 administrator’s console and do the following:
 - a. Click **Export/Import**.

- b. Click **Import XML**. The Select the XML File for Import window opens.
 - c. In the File Name field, type in the XML source file name or click **Browse** to select the XML output file.
 - d. Click **OK**. The Import Package window opens.
 - e. Click **OK** to accept each package. Click **Skip** to bypass any package you do not want to import. After all packages and bundles contained in the output XML have been added, you will be prompted to add the export definition used to create the export output XML file.
 - f. Click **OK** to finish importing the XML output file.
3. Copy the files to the target computer using one of the following methods:
 - From the target computer, map to the source computer. Then, copy the appropriate package files, detail files, and icon files to the target computer.
 - At the source computer, copy the appropriate package files, detail files, and icon files to portable media (such as CD or DVD). Then, bring the portable media to the target computer and copy the files on the target computer.

Note: The folder structure below the document root for the package files, detail files, and icon files must be the same on the target computer as the source computer. Otherwise, you will have to update the package information for each imported package at the target computer to specify the changed paths. The affected fields are the Details field and Icon Path field on the General tab and the Remote file on the Install tab.

Finding help

Help is available in two formats:

- The online help system
- The *Software Delivery Assistant Administrator's Guide*

Help is available from the administrator's console. To get help do one of the following:

- To access the *Software Delivery Assistant Administrator's Guide*, click **Help** and then click **Administrator's Guide (PDF)**. The *Software Delivery Assistant Administrator's Guide* PDF opens.
- To access the online help system, click the question mark (?) beside the field to get an explanation.

Note: The SDA 2.0 program uses Adobe Reader 6.0 or higher to view or print the file. Adobe Reader is available at no charge from:

<http://www.adobe.com/products/acrobat/readermain.html>

Logging out of the SDA 2.0 administrator's console

To log out, click **Logoff**. The Administration Login window opens.

Chapter 5. Troubleshooting

This chapter provides several methods of troubleshooting the SDA 2.0 program.

This chapter includes the following topics:

- “Apache Tomcat logs and manual”
- “Controlling the Apache Tomcat service”

Apache Tomcat logs and manual

The Apache Tomcat program also provides an extensive logging capabilities that can be very useful for troubleshooting Web site problems. These logs are located in the `c:\IBMSDA\tomcat413\logs` directory.

In addition, you can view the Apache Tomcat manual by pointing a browser to the following URL:

<http://jakarta.apache.org/tomcat/tomcat-4.1-doc/index.html>

Controlling the Apache Tomcat service

To control the Apache Tomcat service, right-click **My Computer** and select **Manage**. Double-click **Services and Applications**, then double-click **Services**. Find Apache Tomcat in the list of services and click on it once using the left mouse button to select it. Under the **Actions** menu, click the appropriate menu item to perform the desired action.

Chapter 6. Getting help and support

The SDA 2.0 program is supported by IBM. If you have a problem with the SDA 2.0 program or have questions about a specific feature, a variety of sources are available to help you including documentation, an integrated help system, Web pages, and IBM technical support.

Refer to your SDA 2.0 license for a full explanation of IBM support, terms, and duration. To access the license, complete the following procedure:

1. Start the SDA 2.0 administrator's console.
2. Click **Help**, and then click **View the license**.

Be sure to retain your proof of purchase.

Note: The SDA 2.0 program is not a warranted product. IBM will provide assistance to resolve problems and answer questions about the SDA 2.0 program, but IBM is not obligated to update this version of the code, to enhance its functionality, to resolve problems, or to make future versions of this product available at no charge. Any decision to make updates available or to charge fees for updates is solely at the discretion of IBM.

This chapter includes the following topics:

- "Using the documentation"
- "Using the help system"
- "Using the Web"
- "Contacting an SDA 2.0 technical expert" on page 24
- "Obtaining support" on page 24

Using the documentation

Many problems can be solved without contacting IBM for assistance. If you experience a problem or have a question about the operation or functionality of the SDA 2.0 program, begin with this publication, the *Software Delivery Assistant Administrator's Guide*.

To access the *Software Delivery Assistant Administrator's Guide*, click **Help** from the administrator's console; then click **Administrators Guide (PDF)**.

Using the help system

You can access the help system from the administrator's console. To access the help system, click the question mark (?) beside the field to get an explanation of that field.

Using the Web

The SDA 2.0 site provides the latest technical information and downloadable updates that IBM chooses to distribute. To visit the SDA 2.0 Web site, go to:
<http://www.ibm.com/pc/support/site.wss/document.do?lndocid=MIGR-40QJXR>

Contacting an SDA 2.0 technical expert

Technical assistance for the SDA 2.0 program is available. You can get support information from the following sources:

- From the SDA 2.0 Web site at:

<http://www.ibm.com/pc/support/site.wss/document.do?ln docid=MIGR-4QQJXR>

- By telephone:

To get the telephone number for your country or region, complete the following steps:

1. Go to:

<http://www.ibm.com/pc/support>

2. Click **Support phone list**.

3. Click **ThinkVantage Technologies**.

Obtaining support

Charges for the SDA 2.0 program apply as follows:

- SDA 2.0 code installed on IBM computers: During the first 30 days after the program has been installed, IBM provides free telephone support. After this period, telephone support is provided on a fee-per-incident basis.
- SDA 2.0 code installed on non-IBM computers: Telephone support is provided on a fee-per-incident basis.

The prices associated with fee-based support vary depending on your geographic location. For more information, contact IBM. See “Contacting an SDA 2.0 technical expert” for details.

Appendix A. Sample folder structure

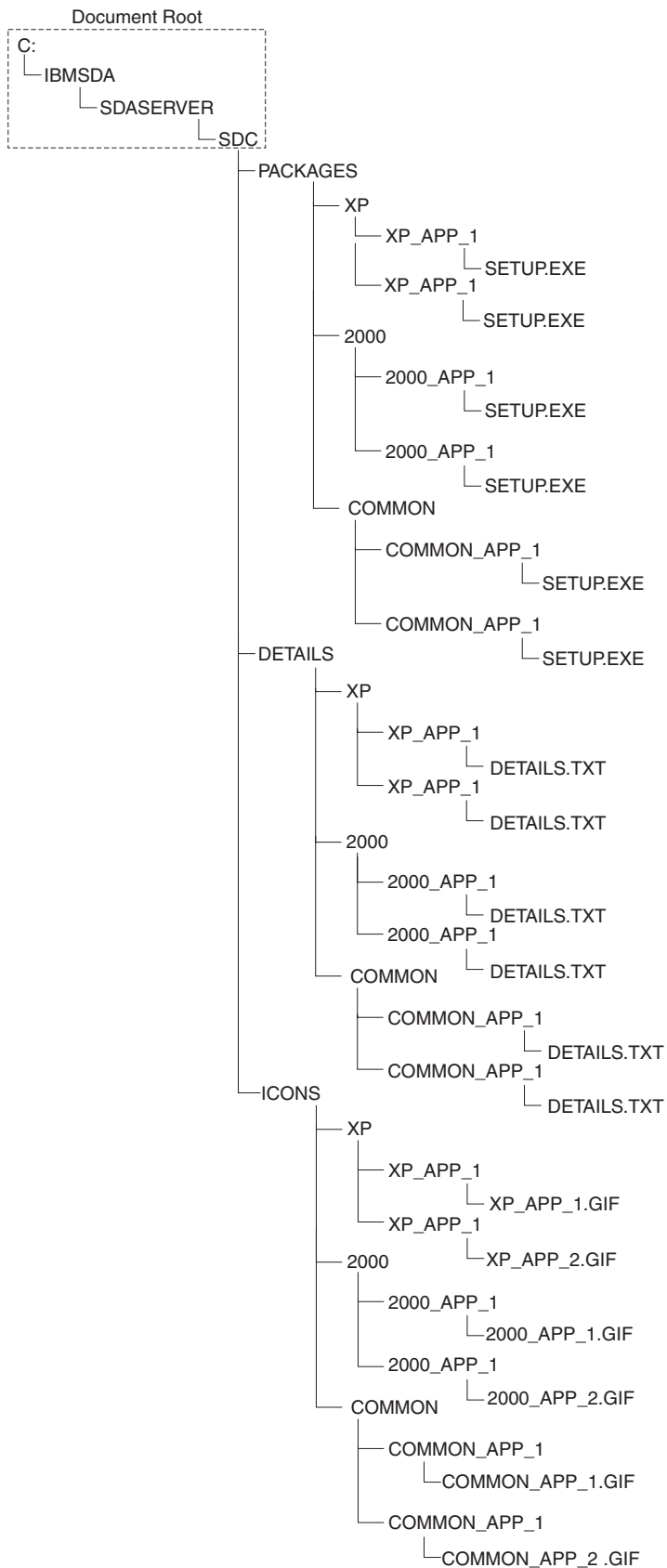
This appendix provides three folder structures as samples that you can use as a reference to set up a folder structure on your SDA 2.0 computer. All software packages, detail files, and icon files stored on the SDA 2.0 computer must be stored under the document root, which by default is:

```
c:\IBMSDA\SDASERVER\SDC
```

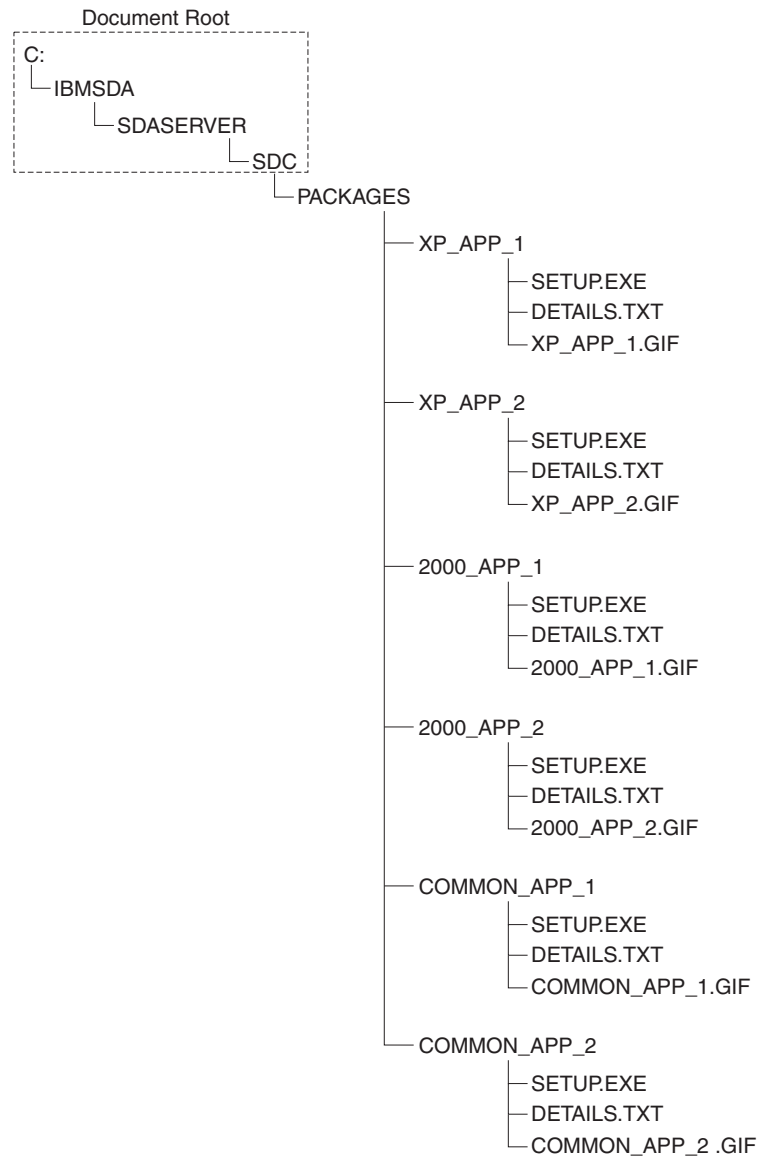
The document root on your server might be different depending on the options you chose during installation. All sample folder structures in this appendix show the default document root.

The folder structure you implement is entirely up to you as long as it resides under the document root. You can organize your files by operating system, type of application, or any other characteristic that meets the needs of your organization.

The following sample shows the use of separate folders for software packages, detail files, and icon files.

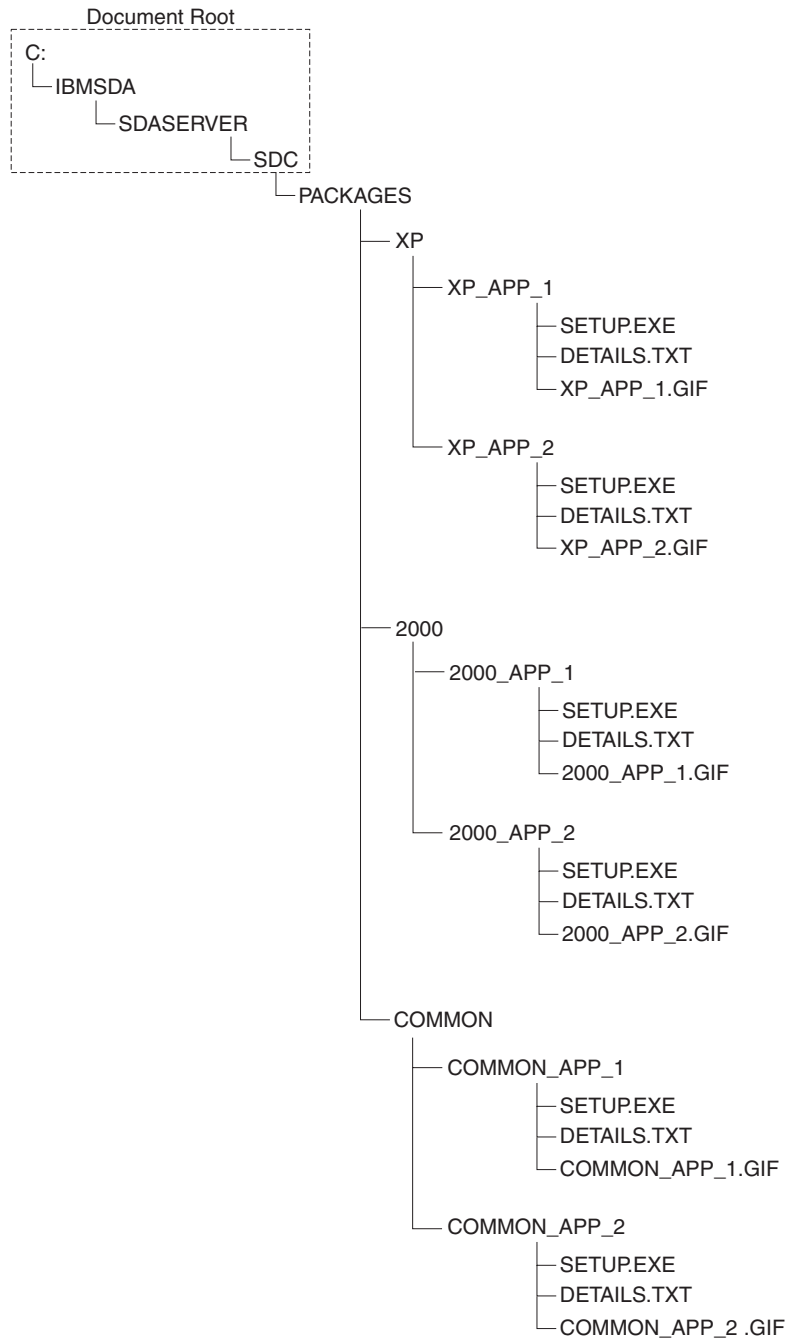


The following sample shows a folder for each software package, each containing the package file, the details file, and the icon file.



The following sample shows separate folders for each operating system, under which are folders for each software package to be used for that operating system. The COMMON folder shown in this example contains folders for software

packages that can be installed on either Windows XP or Windows 2000.



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